



## Improving corporate governance to enhance earnings quality: Empirical evidence from the emerging market of Vietnam

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### ABSTRACT

This study aims to provide more evidence on the earnings quality of companies listed in emerging markets by examining how corporate governance factors affect earnings quality in Vietnam. Using panel data analysis, the research analyzed data from 216 firms listed on Vietnam's two main stock exchanges, the Ho Chi Minh Stock Exchange (HOSE) and the Hanoi Stock Exchange (HNX), between 2017 and 2021. The findings identified six key variables with a significant impact on earnings quality: board size, board activity, net cash flow from operations, return on assets, working capital, and the COVID-19 pandemic. These results highlight the critical role of corporate governance in improving the earnings quality of listed firms. Therefore, this study offers valuable insights for securities analysts, regulatory bodies, and users of accounting information to better understand the relationship between corporate governance and earnings quality in the Vietnamese market.

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### 1. Introduction

During the past 15 years, the topic of corporate governance has attracted increasing attention from researchers in many different fields, such as finance, economics, and accounting. This issue is of greater concern in Asia, especially after the 1997–98 financial crisis, several leading companies have turned difficulties into stepping stones to develop and overcome the crisis successfully. This has sparked the interest of managers, scholars as well as policy advisors in finding effective governance mechanisms. Corporate governance is a multidimensional concept and a very broad topic because it depends on the mechanisms, goals, functions, and participants in the organization. However, this concept is quite new in the Vietnamese financial market. In the year 2005, this concept was first introduced in Enterprise Law in terms of the definition and the implementation mechanism.

On the other hand, earning quality is a matter of concern for analysts, investors, regulators, and other

market participants as earning quality is an important factor in evaluating the main financial situation of an enterprise (Bellovary et al., 2005). In addition, earning quality is the degree to which reported earnings accurately reflect the underlying economic situation as well as enable financial statement users to reasonably evaluate the financial performance of a company (Krishnan and Visvanathan, 2008). Therefore, earning quality is an important indicator to measure the performance of a company. Earning quality is also a tool to predict future cash flows (Lin et al., 2006). The reasonable and correct use of earning data is one of the responsibilities and obligations of corporate governance.

A review of the literature on earnings reveals that a significant number of international studies have been conducted, exploring various aspects of the subject. Specifically, several common dimensions of earnings quality have garnered attention from global researchers, including measurement methods (Dechow and Dichev, 2002; Francis et al., 2005; Ewert and Wagenhofer, 2012), the relationship between earnings quality and earnings management (Aljifri and Elrazaz, 2024), the link between earnings quality and stock value, and the association between earnings quality and firm performance. Overall, these studies consistently show that earnings quality is a crucial factor for financial transparency and corporate stability.

In contrast, within the Vietnamese research context—a developing country with a relatively young and emerging stock market—studies on earnings quality remain modest. Most Vietnamese research has focused on measurement methods, while some have examined the relationships between earnings quality and factors such as cash flow and cash holdings, ownership structure, and financial constraints. Although the volume of research on earnings quality in Vietnam is improving, this topic still faces many challenges compared to international studies. These challenges are primarily related to earnings management, corporate governance systems, and Vietnam's unique regulatory environment, particularly concerning the influence of governance controls on earnings quality in an emerging market like Vietnam. The relationship between corporate governance and earning quality is vital in forming effective corporate management policies and public management policies. Thus, effective corporate governance plays an essential role in increasing earning quality. Based on the above arguments, this study aims to analyze the influence of corporate governance factors on the earning quality of listed companies in Vietnam.

## 2. Literature review

To examine the effect of corporate governance factors on the earning quality of firms listed on the Vietnamese stock market, the article uses Agency theory and stakeholder theory as the foundation of developing arguments and theoretical models.

Agency theory was first proposed by [Ross \(1973\)](#) and later developed by [Jensen and Meckling \(1978\)](#). Agency theory revolves around the relationship between the principal and the agent. Accordingly, the principal will sign a contract with the agent, which agrees on the tasks that the agent is entrusted to perform for the principal. Both principals and agents in this relationship want to maximize their benefits. However, conflicts of interest between the parties may occur due to information asymmetry. Indeed, managers are pressured by personal goals, leading to self-interested behavior. One of the most common self-interested behaviors is that managers manipulate the company's financial information such as revenue and profits to beautify the company's financial reports. To solve this problem, agency theory points out measures to limit managers' self-interested behavior such as building compensation mechanisms and establishing supervisory mechanisms.

Stakeholder theory is a theory of organizational management and business ethics. This theory was initially published by [Freeman \(1984\)](#) with an approach that addresses the “principle of who or what really counts”. In the traditional view of a corporation, shareholders view only the owners or shareholders of a company as important, and the firm has a fiduciary duty to act in the best interests of the company and its shareholders. Accordingly, managers who are considered representatives of

shareholders must make economic decisions to ensure the survival and development of the enterprise while protecting the interests of stakeholders.

The concept of corporate governance has existed for centuries and has originated from the research of [Berle and Means \(1932\)](#). Researchers have also given many different definitions of corporate governance. Although not uniformly defined, corporate governance can be considered as a set of subjects, goals, and institutions to ensure the rights of shareholders, employees, customers, and creditors as well as to promote economic reputation and status

The Organization for Economic Co-operation and Development (OECD) defined corporate governance as a system built to direct and control firms. Corporate governance structure shows how rights and responsibilities are distributed among the various parties involved in a joint stock company, such as the board of directors, managers, shareholders, and other relevant entities.

The research of [John and Senbet \(1998\)](#) provided a more comprehensive definition which stated that corporate governance is a mechanism by which stakeholders of a corporation exercise control over corporate insiders and management such that their interests are protected. Additionally, the study conducted by [Cornett et al. \(2009\)](#) stressed that corporate governance is a process of supervision and governance carried out to ensure the implementation of business administration in accordance with the interests of shareholders. Corporate governance also has a broad meaning aimed at ensuring the rights of stakeholders, not only shareholders but also employees, customers, suppliers, the environment, and state agencies.

Thus, there is no single definition of corporate governance that can be applied to all cases and all institutions. Different definitions of corporate governance come from the differences in institutions, legal mechanisms, and business environments in each country. However, most definitions put the business in a central position. In brief, corporate governance is a system of relationships among stakeholders with different interests related to the direction and governance of corporate activities to appropriately distribute rights and responsibilities, thereby increasing the benefits of shareholders ([Claessens and Fan, 2002](#)).

Earning quality is an important characteristic of a financial reporting system. Most recent regulatory changes in accounting standards, auditing, and corporate governance have been driven by efforts to increase financial reporting transparency. Earning quality is also used in many empirical studies to examine changes in earnings characteristics over time, to assess the impact of changes in accounting standards and the institutional environment, to compare financial statements across countries, and to measure the market price and the effect on the profit when businesses employ different earning quality. The research of [Teets \(2002\)](#) stated that the

concepts of earning quality and earning management have an important characteristic that is not clearly defined. Earning quality and earning management are important issues because of capital markets' reliance on reliable financial reporting. Consistent with the perspectives and methods of measuring earning quality of [Dechow and Dichev \(2002\)](#), [Radzi et al. \(2011\)](#), and [Parte-Esteban and García \(2014\)](#), the author finds that earning quality is truly meaningful when earning quality is considered from the perspective of reflecting the true state of profits with low forecast error, thus it can provide honest information for business managers when making financial decisions. This is also the aspect of earning quality that the authors wish to investigate. Specifically, in this study, the authors examine earning quality in four aspects, including sustainability, predictability, volatility, and the possibility of earning adjustment.

## 2.1. Hypothesis development

### 2.1.1. Board of independence

Board independence, which is a key element of good corporate governance ([Carcello et al., 2011](#)) is measured through the proportion of independent, non-executive members on the board of directors. Having more non-executive board members will lead to a more objective assessment of companies, and companies will maintain appropriate internal control systems to better control risks and improve the quality of financial information disclosure ([Abdullah, 2006](#)). In addition, based on the arguments of delegation theory and resource dependence theory, the higher the independence of the board of directors, the more capable and effective the board of directors is in performing its duties, including the duty of supervising the preparation and disclosure of financial reporting information. Therefore, the first hypothesis is proposed as follows:

**H1:** Board independence has a positive impact on earning quality.

### 2.1.2. Board chairperson's duality

According to agency theory, when the chairman of the board of directors takes on the role of chief executive officer (CEO), in other words, the decision maker is also a supervisor, it will significantly reduce agency costs but not increase firm performance ([Jensen and Meckling, 1978](#)). Several prior studies suggested that board chairperson duality positively affects earning quality ([Nugroho and Eko, 2011](#)). One of the requirements of corporate governance is to strengthen the supervisory function by limiting the concentration of power. The fact that one person holds the dual roles of CEO and the chairman of the board often tends to raise power concentration. When managers have both motivation and

opportunity, they will carry out earnings management behavior ([Alzoubi and Selamat, 2012](#)), which will influence earning quality. These results support the second hypothesis:

**H2:** Board chairperson duality has a negative effect on earning quality.

### 2.1.3. Board size

Board size refers to the number of members participating in management on the board of directors. A board of directors that is too small prevents the company from benefiting from the diverse skills and relevant experience that its members bring. On the contrary, a board of directors that is too large makes management difficult and makes the decision-making process time-consuming. A large board of directors causes delays in communication and making final decisions. Previous studies have reported three different trends in the relationship between board size and earning quality. On the one hand, several studies suggested that there is no relationship between board size and earning quality. On the other hand, some studies found that board size has a significant positive correlation with earning quality ([Kankanamage, 2015](#)). The other result is that board size has a negative impact on earning quality ([Nugroho and Eko, 2011](#)). From the above arguments, this study proposes the third hypothesis as follows:

**H3:** Board size has a negative influence on earning quality.

### 2.1.4. Board activity

Board activity is measured through the board's meeting frequency. The research of [Xie et al. \(2003\)](#) found that the frequency of board meetings can help improve the earning quality. The authors concluded that board activity is an important factor in reducing managers' ability to practice earnings management behavior. Indeed, regular meetings can help the board of directors closely monitor the current business situation, thereby reducing information asymmetry. The previous study by [Gulzar \(2011\)](#) provided empirical evidence that companies with higher frequency of board meetings enhance the monitoring ability of the board of directors. Thus, the following hypothesis is proposed as follows:

**H4:** Board activity has a positive impact on earning quality.

### 2.1.5. Change in the board of directors

The board of directors is responsible for the internal controls necessary to enable the preparation of financial statements that are free of material misstatement, whether due to unintentional error or fraud. They are also responsible for preventing and

detecting fraud. In addition, they oversee preparing and presenting financial statements. Change in the board of directors may initiate bad intentions related to earning quality. Based on the above arguments, this study proposes the fifth hypothesis as follows:

**H5:** Change in the board of directors negatively affects earning quality.

### 2.1.6. Financial leverage

In previous research on corporate governance and earning quality, financial leverage is widely used as a control variable (Becker et al., 1998; Jiang et al., 2008). Financial leverage represents a company's debt structure (Erickson et al., 2004; Efendi et al., 2007). Many prior studies found a positive relationship between financial leverage and earning quality since companies with higher debt ratios have more incentive to participate in profit adjustment activities to meet the debt covenant requirements (Efendi et al., 2007; Humeedat, 2018). Additionally, Becker et al. (1998) stated that financial leverage has a negative impact on the firm's earning quality. These results support the next hypothesis:

**H6:** Financial leverage negatively influences earning quality.

### 2.1.7. Net cash flow from operating activities

The research by Becker et al. (1998) demonstrated that companies with high operating cash flow are less likely to use accruals to increase profits as they have performed well. Conversely, companies with poor net cash flow from operating activities have incentives to adjust earnings to send a positive signal to investors. The study of Lobo and Zhou (2006) also shared the same view that firms with strong cash flow from operating activities are less likely to adjust profits. Therefore, the seventh hypothesis is proposed as follows:

**H7:** Net cash flow from operating activities has a positive effect on earning quality.

### 2.1.8. Return on assets

The research of DeAngelo et al. (1994) stressed that return on assets (ROA) can limit opportunities to intervene in profit goals. The higher the profitability, the better the financial situation and the higher the liquidity of a firm. This increases the dynamism of firms in reporting business results with good quality. The studies of Bahmani (2014) pointed out that ROA has a positive relationship with earning quality. The research of Doyle et al. (2007) also found that companies with low ROA have lower earning quality.

Meanwhile, the research of Francis et al. (1996), Waweru and Riro (2013), and Liu et al. (2017) claimed that there is no relationship between ROA

and earning quality. From the above arguments, this study proposes the next hypothesis as follows:

**H8:** Return on assets has a positive influence on earning quality.

### 2.1.9. Change of auditing company

Auditing companies oversee verifying the truthfulness and reasonableness of financial statements, contributing to increasing the reliability of financial statements for users such as investors and analysts. However, not all audited financial statements are trustworthy. It depends on many factors such as the quality of the auditing company, and the qualifications of the auditors. The research of Cascino et al. (2010) stated that the reputation of the auditing company will increase the earning quality for the company. Besides that, the study of Tendeloo and Vanstraelen (2008) argued that large auditing firms tend to better prevent profit fraud. Thus, changing auditing companies could provide a signal that a company is starting a profit-related fraud. These results support the following hypothesis:

**H9:** Change of auditing company negatively impacts earning quality.

### 2.1.10. Working capital

Accumulations of working capital, such as changes in accounts receivable and inventory, contain important information about the companies' earning quality, which helps predict future profits. Hence, the next hypothesis is proposed as follows:

**H10:** Working capital positively affects earning quality.

The COVID-19 pandemic has significantly impacted economies worldwide, causing a slowdown or stagnation in trade, online transactions, and overall economic activity. Many experts argue that declining consumer purchasing power has adversely affected business revenues, leading to financial challenges. Moreover, the pandemic has created favorable conditions for the Fraud Triangle—comprising opportunity, motivation, and rationalization—thereby increasing the likelihood of financial statement fraud. Research by the Association of Certified Fraud Examiners (ACFE, 2008) suggests that economic crises can raise the probability of financial fraud by approximately 80 percent. Given the economic consequences of COVID-19, the risk of financial fraud may be even higher, leading to the following hypothesis:

**H11:** The COVID-19 pandemic has a positive impact on earnings quality.

From the above arguments, the research model is generalized through Fig. 1.

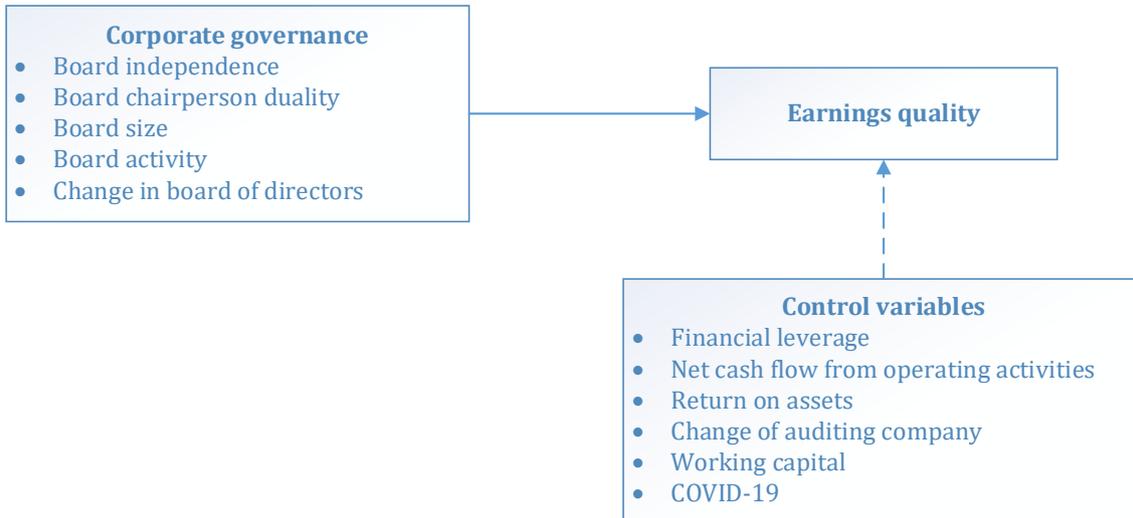


Fig. 1: Theoretical model

### 3. Research methodology

Many models are proposed to measure the earning quality of companies listed on the stock market such as Jones’s (1991) model; Beneish’s (1999) model; Friedlan’s (1994) model. However, Francis et al. (2005) argued that uncertainty in accruals is best captured by the accrual quality measure of Dechow and Dichev (2002). Therefore, the study applies to this model to measure earning quality which is proxied by EQDD. Specifically:

$$EQDD_{it} = \frac{\Delta WC_{it}}{TABq} - \gamma_0 - \gamma_1 \frac{\Delta CFO_{it-1}}{TABq} - \gamma_2 \frac{\Delta CFO_{it}}{TABq} - \gamma_3 \frac{\Delta CFO_{it+1}}{TABq} \quad (1)$$

where,  $\Delta WC_{it}$  is the change in working capital calculated over two consecutive years t-1 and t.  $\Delta CFO_{it-1}$ ,  $\Delta CFO_{it}$ ,  $\Delta CFO_{it+1}$  are operating cash flow in years t-1, t, t+1, respectively.  $TABq$  is the average total assets in year t.  $\gamma_0, \gamma_1, \gamma_2, \gamma_3$  are the coefficients of the model obtained after regressing

$$\frac{\Delta WC_{it}}{TABq} \text{ on } \frac{\Delta CFO_{it-1}}{TABq}, \frac{\Delta CFO_{it}}{TABq}, \frac{\Delta CFO_{it+1}}{TABq}.$$

The study has five variables measuring corporate governance characteristics and 7 control variables, specifically:

$$EQDD_{it} = \beta_0 + \beta_1 BoardIND_{it} + \beta_2 BoardDul_{it} + \beta_3 BoardSIZE_{it} + \beta_4 BoardACT_{it} + \beta_5 BoardCha_{it} + \beta_6 FL_{it} + \beta_7 NCF_{it} + \beta_8 ROA_{it} + \beta_9 AudCha_{it} + \beta_{10} WC_{it} + \beta_{11} COVID + \varepsilon_{it}. \quad (2)$$

Corporate governance is measured through five variables, including:

- Board of independence (BoardIND): Number of independent members in the board of directors in year t;
- Board chairperson duality (BoardDul): Dummy variable; if the CEO concurrently holds the position of the chairman of the board of directors, BoardDul has the value 1; otherwise BoardDul has the value 0;

- Board size (BoardSIZE): Number of members on the board of directors in year t;
- Board activity (BoardACT): Number of meetings of the board of directors in year t;
- Change in the board of directors (BoardCha): Dummy variable; if the company changes its board of directors during the research period, BoardCha has the value 1; otherwise BoardCha has the value 0.

Control variables are related to firm-specific characteristics, including:

- Financial leverage (FL) is calculated by dividing total debt in year t by equity in year t;
- Net cash flow from operating activities (NCF);
- Return on assets (ROA) calculated by dividing profit after tax in year t by total assets in year t;
- Change of auditing company (AudCha): Dummy variable; if the company changes its auditing company during the research period, AudCha has the value 1; otherwise AudCha has the value 0;
- Working capital (WC) is calculated by taking current assets in year t and deducting current liabilities in year t.
- COVID-19 pandemic (COVID): this is a dummy variable, and its value is 1 if the time is in 2020 or 2021; otherwise, COVID is set to 0.

According to the model of Dechow and Dichev (2002), the measure of earning quality can only be estimated when there is data from the current year, the previous year, and the next year. Therefore, the data collection period in this study lasts seven years from 2015 to 2021 and the research period lasts five years between 2017 and 2021. Based on the research period, the research sample is 220 companies listed on the Ho Chi Minh Stock Exchange (HOSE) and the Hanoi Stock Exchange (HNX), so the total number of observations is 1,100 observations. To ensure the reliability of data, this study excludes four companies that do not have sufficient data. Therefore, the remaining observations used for analysis are 1,080 observations. Data is collected

from the financial reports of companies listed on the HOSE and HNX by using the purposive sampling method, specifically:

- Not operating in the field of finance and banking as companies operating in these fields have specific characteristics so their financial statements are different from the financial statements of companies operating in other industries.
- Having full financial statements from 2017 to 2021.
- Having an accounting period based on the calendar year from January 1st to December 31st

Since the data in this study is designed in panel data form, the Ordinary Least Squares (OLS), Fixed Effects Model (FEM), and Random Effects Model (REM) are chosen to estimate the influence of corporate governance aspects on earnings quality. The FEM is appropriate when focusing on how time-varying factors influence earnings quality, and it's particularly useful when omitted variables might be correlated with the regressors. Whereas REM is preferable when firm-specific unobserved heterogeneity is not correlated with the independent variables. To determine whether FEM or REM is more appropriate in panel data analysis, the Hausman test is utilized too. If the null hypothesis (that the unobserved individual effects are uncorrelated with the independent variables) is rejected, FEM should be used. Finally, the study will apply the Feasible Generalized Least Squares (FGLS) method to improve the model if there is autocorrelation and/or heteroskedasticity in the model.

## 4. Research Results

### 4.1. Descriptive data

Proportion of different sectors in the research sample is illustrated in Fig. 2. As can be seen from Fig. 2, the manufacturing sector has the highest proportion of 36.57 percent. The real estate and construction sector accounts for 19.44 percent, closely followed by other industries (17.59 percent) and the transportation and warehousing industry (12.04 percent). Next, the trade industry makes up 8.80 percent. Finally, the service sector constitutes the lowest proportion, namely 5.56 percent.

### 4.2. Correlation matrix

The study uses the Pearson test to check the correlation between independent variables and dependent variables. The dependent variable used in the model is the earning quality proxied by the EQDD coefficient. Based on the results of the correlation matrix in Table 1, all the pairs of correlation coefficients among the variables in the model are less than 0.8; the highest value of the correlation coefficients is 0.538 – the correlation between net

cash flow from operating activities and working capital. These results imply that the estimated results are statistically unbiased (Table 1).



Fig. 2: Proportion of different sectors in the research sample

### 4.3. Regression analysis

To investigate the factors affecting the earning quality of companies, the absolute value of the residual from the model of Dechow and Dichev (2002) of each specific company each year is used as a measure of earning quality and is regressed on firm performance, revenue growth, firm size, firm age, financial leverage, and capital intensity. The research results are presented in Table 2.

The Hausman test results show that the value of Prob > Chi2 equals 0.1269 which is greater than 0.05. Thus, it can be concluded that the REM model is more suitable than the FEM model in explaining the relationship between the dependent variable and independent variables in the research model. The study also conducts tests for multicollinearity problems, heteroscedasticity issues, and autocorrelation phenomena. Specifically:

- Test for multicollinearity problems: The study tests the phenomenon of multicollinearity by using the Variance Inflation Factor (VIF). If the value of VIF exceeds 10, there is a multicollinearity issue in the model. The test result shows that the VIF coefficient ranges from 1.07 to 1.55, proving that the model does not have a multicollinearity phenomenon. In other words, the explanatory variables are not correlated with each other, so the model is suitable.
- Test for heteroscedasticity problem: The study tests the phenomenon of heteroscedasticity by using the Breusch and Pagan Lagrangian Multiplier test for random effects. The test result shows that the value of Prob > Chi2 equals 0.000 which is smaller than 0.05. Therefore, it can be concluded that the model has heteroscedasticity issues.
- Test for autocorrelation problem: The study tests the phenomenon of autocorrelation by using the Breusch – Godfrey test. The test result shows that the value of F-statistic equals 2.408 and the value of Prob > F equals 0.1222 which is greater than

0.05. Thus, it can be concluded that the model does not have a first-order autocorrelation issue.

To solve the issue of heteroscedasticity, the study applies the FGLS estimation method. The results from Table 2 show that there are seven variables impacting quality. In more detail, among corporate

governance factors, board size (BoardSIZE) and board activity (BoardACT) positively impact earning quality. Besides that, among control variables, net cash flow from operating activities (NCF), return on assets (ROA), working capital (WC), and COVID-19 (i.COVID) have statistically significant effects on earning quality.

**Table 1:** Correlation matrix among the variables in the model

Variable	BoardIND	BoardDul	BoardSIZE	BoardACT	BoardCha	FL	NCF	ROA	AudCha	WC	COVID
BoardIND	1.000										
BoardDul	0.126***	1.000									
BoardSIZE	-0.152***	-0.027	1.000								
BoardACT	0.010	-0.047	-0.028	1.000							
BoardCha	0.034	0.001	0.081***	0.099***	1.000						
FL	-0.038	-0.015	0.209***	0.018	0.058	1.000					
NCF	0.029	-0.054*	0.151***	0.151***	0.089***	-0.015	1.000				
ROA	-0.063**	0.012	-0.005	-0.052*	-0.079***	-0.351***	0.161***	1.000			
AudCha	0.182***	0.046	-0.069**	-0.034	0.053*	-0.069**	-0.092***	0.012	1.000		
WC	0.071**	-0.057*	0.282***	0.191***	0.103***	0.003	0.538***	0.122***	-0.064**	1.000	
COVID	0.061**	-0.147***	0.044	0.069**	0.073**	0.003	0.003	-0.072**	0.007	0.052*	1.000

\*, \*\* and \*\*\*: Indicate statistical significance at the 10 percent, 5 percent, and 1 percent level, respectively

**Table 2:** Estimated results of the model by using OLS, FEM, REM, and FGLS method

	EQDD	OLS	FEM	REM	FGLS
BoardIND		-0.003*	-0.000	-0.003*	-0.001
BoardDul		0.008	-0.034	0.008	-0.008
BoardSIZE		0.001	-0.001	0.001	0.001***
BoardACT		-0.000	0.0003	-0.000	0.001*
BoardCha		0.018	0.016	0.018	0.001
FL		-0.005	-0.032**	-0.005	-0.002
NCF		0.000***	0.000	0.000***	0.000***
ROA		0.533***	0.712***	0.533***	0.509***
AudCha		-0.011	-0.009	-0.011	-0.008
WC		0.000***	0.000***	0.000***	0.000***
i.COVID		0.020	0	0	0.014***
Constant		-0.07128	0.02114	-3.37000	
	Number of observations			1,080	
	P-value (Hausman-test)			0.1269	

**5. Discussion**

**Board Size:** the finding that board size positively influences earnings quality aligns with some previous studies but contradicts the initial hypothesis, which anticipated a negative or neutral impact. This result is comparable to Kankanamage (2015), who found that an optimal board size enhances earnings quality by improving decision-making efficiency. In emerging markets, board size has been a contentious issue. For instance, Yermack (1996) suggested that in more developed markets, larger boards are often associated with inefficiencies. However, in emerging markets such as India and Malaysia, larger boards have been shown to provide better oversight due to the diverse expertise and perspectives they offer, which supports better governance practices. This could be attributed to the need for more vigilant monitoring in contexts where regulatory frameworks may be weaker, thereby making a diverse board a critical asset for ensuring earnings quality.

In Vietnam, a relatively young market, this finding is particularly relevant as it suggests that board size contributes positively to governance and earnings quality, indicating that having a sufficiently large board helps mitigate financial misreporting, particularly in markets where external oversight mechanisms may not be as robust as in developed economies. This result is in line with studies from

other emerging markets, where board size is crucial for improving transparency and financial integrity.

**Board Activity:** The positive relationship between board activity (measured by meeting frequency) and earnings quality is consistent with the study's hypothesis and is supported by findings from Mashayekhi and Bazaz (2008). In emerging markets, frequent board meetings have been associated with better financial reporting and governance outcomes. For example, Boshnak (2021) found that in Saudi Arabia, frequent board meetings led to improved monitoring and reduced earnings manipulation. The present study corroborates these findings, suggesting that in Vietnam, regular board meetings help maintain control over corporate governance processes and enhance the quality of financial reporting. This may be particularly important in markets where external scrutiny is less developed, and thus internal mechanisms like board oversight play a more pivotal role in ensuring earnings integrity.

**Net Cash Flow from Operating Activities:** The finding that higher net cash flow from operating activities positively correlates with earnings quality is consistent with studies in both developed and emerging markets. In emerging markets, companies with stronger cash flow from operations are less reliant on earnings manipulation to present an attractive financial position. Becker et al. (1998) and Lobo and Zhou (2006) confirmed that companies

with healthier operating cash flow are less likely to engage in earnings management practices because they have less need to artificially inflate their financial performance. This result is particularly important in emerging markets like Vietnam, where firms may face more volatility in cash flows due to economic instability. Companies with stable and strong cash flows are better positioned to maintain high earnings quality, as they can rely on operational performance rather than accounting adjustments to meet financial targets. This is supported by findings from [Abdul Rahman and Haneem Mohamed Ali \(2006\)](#) in Malaysia, where cash flow stability was linked to higher earnings transparency.

**Return on Assets (ROA):** The positive association between ROA and earnings quality, as shown in the current study, supports the hypothesis and aligns with prior findings from [Hamidzadeh and Zeinali \(2015\)](#) and [Doyle et al. \(2007\)](#). In emerging markets, firms with higher ROA tend to demonstrate higher earnings quality because profitability often reflects operational efficiency, which limits the need for earnings manipulation. In countries like Indonesia and Brazil, studies have shown that firms with high profitability, as measured by ROA, are less likely to manipulate earnings, primarily because strong operational performance provides legitimate support for reported earnings. Similarly, Vietnamese-listed companies with higher ROA may reflect operational success, which reduces the incentive for earnings management, contributing to greater transparency in financial reporting.

**Working Capital:** The positive effect of working capital on earnings quality aligns with [Richardson Scott and Sloan \(2003\)](#). In emerging markets, managing working capital efficiently is often more critical than in developed markets due to the higher liquidity risks and credit constraints faced by companies. Proper working capital management ensures that firms can finance their operations without resorting to earnings manipulation to meet short-term financial obligations. In markets such as Vietnam, where access to external financing can be limited, firms that manage working capital effectively are better able to maintain high earnings quality. This finding is supported by [Al-Najjar \(2015\)](#), who noted that in Jordanian firms, efficient working capital management was linked to improved earnings quality, as companies could meet their operational needs without distorting financial statements to appear more liquid or solvent.

**COVID-19 Impact:** The influence of COVID-19 on earnings presents mixed results, as evidenced by this study and others. While this study finds that earnings quality improved during the pandemic due to increased scrutiny by boards of directors, this contrasts with findings from [Xiao and Xi \(2021\)](#) and [Aljawaheri et al. \(2021\)](#), who reported a decline in earnings quality during the pandemic in China and Iraq, respectively. These contrasting findings may be due to differences in market structures, corporate governance practices, and the extent of government support during the pandemic. In emerging markets,

where businesses shifted to online operations, boards of directors had more opportunities to focus on strategic financial oversight, potentially improving earnings quality. This contrasts with countries like Iraq, where companies may have faced more operational disruptions without the necessary digital infrastructure, leading to increased earnings manipulation. The mixed findings highlight the need for further research to understand the varying impacts of global crises on earnings quality in different emerging markets.

## 6. Conclusion

Earnings quality is a critical indicator that reflects both the quality of financial reporting and the future performance of a company. It plays a significant role in influencing investors' decisions. A key academic contribution of this study to the research community in Vietnam is the application of [Dechow and Dichev's \(2002\)](#) model for measuring earnings quality. The study utilizes panel data from 216 companies listed on the HOSE and the HNX over the period 2017 to 2021 and applies the Feasible Generalized Least Squares (FGLS) estimation method. The findings demonstrate that board size, board activity, net cash flow from operating activities, return on assets, working capital, and the impact of COVID-19 positively influence earnings quality. These results underscore the importance for policymakers to consider corporate governance characteristics when evaluating the earnings quality of listed companies. Specifically, policies should be formulated regarding the optimal size of the board of directors and the minimum and maximum number of board meetings to improve the earnings quality of listed firms.

Although this study provides empirical evidence on the relationship between corporate governance and earnings quality, there remain certain limitations that offer opportunities for further research in Vietnam. Specifically, this study only employed five factors to represent corporate governance and used the absolute value of residuals to estimate earnings quality. Additionally, [Dechow and Dichev's \(2002\)](#) model has certain limitations related to accrual estimation errors, cash flow volatility, and the omission of non-accrual-based earnings quality factors, which this study has overlooked. Therefore, future studies could adopt a broader range of measures to estimate earnings quality to identify similarities as well as differences in research findings.

## List of abbreviations

HOSE	Ho Chi Minh Stock Exchange
HNX	Hanoi Stock Exchange
FEM	Fixed effects model
REM	Random effects model
OLS	Ordinary least squares
FGLS	Feasible generalized least squares
VIF	Variance inflation factor
ACFE	Association of Certified Fraud Examiners

OECD	Organization for Economic Co-operation and Development
ROA	Return on assets
FL	Financial leverage
NCF	Net cash flow from operating activities
WC	Working capital
COVID	COVID-19 pandemic
EQDD	Earnings quality (proxied by Dechow and Dichev's model)
CEO	Chief executive officer
BoardIND	Board independence
BoardDul	Board chairperson duality
BoardSIZE	Board size
BoardACT	Board activity
BoardCha	Change in the board of directors
AudCha	Change of auditing company

## Compliance with ethical standards

## Conflict of interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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